GRADE: 4^{th} – Adult TIME: $1-1\frac{1}{2}$ hours

SEASON: All

SURVIVAL ACTIVITY

National Science Teaching Standards

A. Science as INQUIRY

E. Science TECHNOLOGY

F. Science in PERSONAL and SOCIAL PERSPECTIVE

G. HISTORY and NATURE of Science

Background Information:

Statistics show that about 1 in 7 of us will find ourselves in a survival situation at some time in our lives. How well we are prepared for, and how we react to that situation will help determine if we will survive.

Objective

The purpose of this activity is to help students learn how to prepare for and react appropriately to survival situations in the outdoors.

Pre Activity:

- Visit web site: Survival Basics, www.bcadventure.com/adventure/wilderness/survival
- Invite a naturalist to speak to your students about survival. A possible speaker: Mike Havlik, Naturalist, Boone YMCA Camp, Boone, IA 50036 or contact your local county conservationist.
- Call the American Red Cross. They have videos, brochures, and speakers that can talk about survival.

Materials

• Backpack containing the following items:

First aid kit, compass, topographic map of area, fire building kit, whistle, tarp, large plastic bag, insect repellant, sunscreen, metal can, reflective device, watch, flashlight, water bottle, energy bar, hat, jacket, socks, bandana, plus other less necessary items such as money, keys, etc.

Procedure

- 1. Begin a discussion about what a person should do to prepare for going on a hiking trip or other outdoor adventure. Have the students make suggestions, which should include:
 - Tell someone where you are going, who you are going with, and when you plan to return (Write the information down!)
- Go where you said you were going, or let someone know if you decided to go somewhere else
- Never go on an outdoor excursion alone.
- Take along a compass and map, and know how to use them.

- Wear proper clothing and take appropriate gear. Remember that the weather can change suddenly.
- If going somewhere unfamiliar, plan for your trip to end before dark, if possible.
- **2.** Explain that the worst reaction in response to an emergency is to PANIC! If you find yourself in a survival situation, try to remain calm. To avoid panic, use the STOP Principle.
 - **S** = **STOP**! Calm yourself.
 - **T** = **THINK** about your situation, including possible injuries, weather, time of day.
 - **O = OBSERVE.** What do you have with you, and what is around you that might be helpful? Study your map and look for landmarks on the map and in your surroundings. Listen for any sounds that might be helpful, such as traffic or moving water. If nothing seems familiar, STAY WHERE YOU ARE!
 - **P** = **PLAN.** Make a plan for how to best use your energy and resources to survive for the next 24 hours. (Most people who are lost are found within 24 hours.)
- **3.** Begin to lead the group on a hike, taking the backpack. Explain that the hike will include a simulated survival activity. Have students point out and discuss possible dangers along the way. Natural hazards could include: poison ivy, stinging nettles, low branches, logs that could be tripped over, steep slopes with drop-offs, etc.

At a good point along the trail, lay the contents of the backpack on the tarp. Present to the group a scenario of a survival situation, such as being lost in the woods on a rainy summer evening, or a hiker slipping and falling down a steep slope, injuring his ankle. (More situations may be found on the following page.) Have the group choose 10 items from the tarp that they think would be the most useful. Ask the students to work together to rank the items from 1-10, with 1 being the most useful. Have members of the group tell what they would use each item for. Have the students tell what they would do in the situation presented, using the STOP Principle. Encourage them to improvise by adding landmarks or other resources to the scenario and by coming up with creative uses for the objects they have chosen. Review the chosen items with the class, as well as the items not selected. Have students try to come up with alternate uses for the objects. Some uses for items in the backpack are:

Tarp- Shelter, stretcher to move injured person

First aid kit-Flashlight-Useful to assist injured persons Light, signaling (3 flashes)

Whistle- Signaling (3 whistle blasts = universal signal for help)

Garbage bag- Shelter, poncho, collecting water

Matches, flint- Fire for signal, warmth, cooking, keeping animal/insects away, melting

snow, companion

Steel wool - Use with battery to start fire

Compass- Use with map/landmarks or alone to follow straight path

Map- Use with compass or to identify landmarks

Extra clothing- Prevent hypothermia or sunburn

Metal can- Boil water, melt snow, collect/carry things

Pocket knife-Reflective device- Signaling, possibly starting fire Bandana-Signal, rope, trail marker, warmth

Energy bar- Food sustains energy and helps morale Watch- Useful to help determine time and direction

- **4.** If time allows, plan a different survival scenario, or lead into one of the following activities:
 - Survival First Aid
 - Survival Fire Building
 - Survival Shelter Building

Possible Scenarios for Survival Situations

1. You and a friend have been hiking all afternoon in a large forest. The sun is beginning to set, and you decide that it is time to head for home. Unfortunately, you and your friend disagree about the direction that will lead you back.

What items do you need to have with you? What should you do?

2. It is a beautiful 85 degree day in late May. You are camping with your family, including you, your parents, your aunt, (whose idea of exercise is dialing her cell phone), and your 5-year-old twin brothers. You and your family have just finished swimming and have pulled shorts on over your swimsuits. You all decide to go for a hike in a nearby wilderness area. After about half an hour, you notice the temperature beginning to drop and the sky growing darker. You can hear thunder rumbling closer and closer, and rain begins coming down in sheets. The wind picks up, and everyone is drenched and chilled. The twins are screaming!

What should you have with you? How will you use it?

3. Your best friend's family has taken you along on a trip to Colorado. You have never been to the mountains, and are anxious to see how high you can climb. You and your friend decide to try to reach the top of a modest-looking peak that you can see from your campsite. It looks pretty close, and not all that high, so you leave a note for the family saying that you and your friend will be back in a couple of hours. About an hour and a half into the climb, your friend slips on some loose rocks, falling down a steep slope and injuring her ankle.

What items have you brought along with you? What will you do?

4. Your cousin's birthday was yesterday, and the best gift was a brand new puppy! The two of you decide to take it for a walk in the woods near his farm. You take along your compass, since you had an orienteering session at a scout meeting a few months ago. It is a brisk fall afternoon, and most of the leaves have already fallen from the trees. You set out with your compass in your pocket, chasing after the puppy as she runs through the crunching leaves. You are having so much fun following her that you lose all track of time and direction. All of a sudden, you realize that you have no idea where you are. All of the paths are totally covered with leaves. The puppy is tired, and your cousin is worried.

What do you have with you that can help you? What should you do?

Post Activity:

- In groups have students invent their own scenarios. The possibilities are endless! Each group should write the scenario down. Have groups switch their stories and prepare to role play the scenario and a solution. Discuss their solutions and other possibilities.
- Read *Hatchet* by Gary Poulson as a class read aloud. Encourage students to read other books of his; most are about survival.

Post Discussion:

- Discuss hypothermia and situations it may relate to in Iowa.
- Have students share situations they have been in that were scary and needed to be thought through carefully.